EFFICIENT POWER CONTROL OF A POWER AMPLIFIER BY PERIPHERY SWITCHING Thomas R. Apel

ABSTRACT

A power amplifier having a first amplifier output stage and a parallel second amplifier output stage is provided. The first amplifier output stage is enabled (i.e., fully biased) during both high power and low power operating modes. The second amplifier output stage is disabled during the low power operating mode, and enabled during the high power operating mode. Because neither the first nor second amplifier output stage is operated in an extremely low quiescent current state, the linearity of the power amplifier is maintained for both high power and low power operating modes.